

THE INVENTION CLAIMED IS:

1. A security and energy control system comprising:
  - a card reader for generating an identification (ID) code in response to detecting an ID card;
  - a motion sensor for generating a motion signal in response to detecting motion in a field of view of the motion sensor;
  - a temperature sensor for generating a temperature signal based on a temperature detected thereby;
  - a transmitter for generating at least one wireless control signal based on the ID code, the motion signal and/or the temperature signal;
  - a first switch connected between an energy source and an energy consumption device;
  - a first receiver responsive to a first wireless control signal from the transmitter for causing the first switch to connect the energy source to the power consumption device;
  - means for conveying a message on a communication link; and
  - a second receiver responsive to a second wireless control signal from the transmitter for causing the conveying means to convey the message on the communication link, wherein the conveying means includes a first controller for producing the message based on the second wireless control signal, transmitting means responsive to the first controller for transmitting the message on the communication link and a second switch connected between the transmitting means and the communication link, the second switch responsive to the first controller for connecting the transmitting means to the communication link.
2. The system as set forth in claim 1, wherein the transmitting means includes a modem.
3. The system as set forth in claim 1, further including a second controller responsive to the motion signal for causing the transmitter to output the second wireless control signal which causes the conveying means to convey the message including an indication that the motion signal was generated.

4. The system as set forth in claim 3, wherein the second controller is responsive to the temperature signal for causing the transmitter to generate the first wireless control signal.

5. The system as set forth in claim 1, further including a second controller responsive to the motion signal and the ID code, wherein:

the second controller determines if a predetermined interval expires from a time when the motion signal is generated;

if the ID code is generated before the predetermined interval expires, the second controller causes the transmitter to generate the second wireless control signal which causes the conveying means to convey the message including the ID code; and

if the ID code is not generated before the predetermined interval expires, the second controller causes the transmitter to generate the second wireless control signal which causes the conveying means to convey the message including an indication that the ID code was not received before the predetermined interval expired.

6. The system as set forth in claim 1, further including:

a second controller responsive to the motion signal and the ID code for determining if the ID code is generated within a predetermined interval after the motion signal is generated and for causing the conveyed message to include an indication thereof; and

a third controller responsive to the conveyed message for setting an alarm condition when the conveyed message includes the indication that the ID code was not generated before the expiration of the predetermined interval.

7. The system as set forth in claim 1, further including:

a second controller responsive to the ID code for causing the conveyed message to include the ID code; and

a third controller responsive to the conveyed message for setting an alarm condition when the ID code does not match a reference ID code.

8. The system as set forth in claim 1, further including:  
means for receiving the conveyed message from the communication link; and

a second controller which records data related to each received message and/or a time each received message is received by the receiving means.

9. The system as set forth in claim 1, wherein:  
the ID code is magnetically recorded on the ID card; and  
the card reader includes means for detecting the ID code when the ID card is positioned adjacent or moves adjacent the card reader.

10. The system as set forth in claim 1, further including a second controller responsive to the temperature signal for causing the transmitter to generate the first wireless control signal which causes the first switch to selectively connect/disconnect the energy source to/from the power consumption device as a function of the temperature signal or a predetermined duty cycle.

11. The system as set forth in claim 1, wherein at least one of the switches comprises a relay.

12. A security and energy control system comprising:  
means for outputting an identification (ID) code related to an identity of an individual;  
means for producing a motion signal in response to detecting motion in a field of view;  
means for producing a temperature signal related to an ambient temperature;  
means for generating at least one wireless control signal based on the ID code, the motion signal and/or the temperature signal;  
means for receiving the at least one wireless control signal; and  
at least one of (i) means for connecting an energy source to an energy consumption device in response to the receiving means receiving the at least one wireless control signal and (ii) means for conveying a message to a communication

link in response to the receiving means receiving the at least one wireless control signal, wherein the receiving means includes at least one of:

a first receiver responsive to a first wireless control signal for causing the connecting means to connect the energy source to the energy consumption device; and

a second receiver responsive to a second wireless control signal for causing the conveying means to convey the message to the communication link.

13. The system as set forth in claim 12, further including means for determining when a predetermined interval expires from a time when the motion signal is generated, wherein:

in response to output of the ID code before expiration of the predetermined interval, the generating means generates the second wireless control signal which causes the conveying means to convey the message including the ID code; and

in response to expiration of the predetermined interval before output of the ID code, the generating means generates the second wireless control signal which causes the conveying means to convey the message excluding the ID code.

14. The system as set forth in claim 13, further including means for processing the message conveyed to the communication link including at least one of:

- (i) recording a time of day the message is processed;
- (ii) recording the ID code included in the message when the ID code matches a reference ID code;
- (iii) setting an alarm condition when the ID code does not match a reference ID code; and
- (iv) setting the alarm condition when the message does not include the ID code.

15. The system as set forth in claim 14, wherein the conveying means includes:

a first controller for converting the second wireless control signal received by the second receiver into the message;

a first modem responsive to the first controller for transmitting the message to the communication link; and

a switch responsive to the first controller for selectively connecting the modem to the communication link.

16. The system as set forth in claim 15, wherein the processing means includes:

a second modem connected to the communication link for receiving the message transmitted by the first modem; and

a second controller for acting on the message.

17. The system as set forth in claim 12, wherein the connecting means includes:

a controller for converting the first wireless control signal received by the first receiver into data; and

a switch responsive to the controller for selectively connecting/disconnecting the energy source to/from the energy consumption device as a function of the data.

18. The system as set forth in claim 17, wherein:

the switch selectively connects/disconnects the energy source to/from the energy consumption device at one of a predetermined duty cycle and a temperature related to the temperature signal.

19. The system as set forth in claim 12, wherein the communication link includes at least one of a telephone line, a computer network cable and a wireless communication link.

20. A security and energy control method comprising the steps of:

(a) determining if an object having an identification (ID) code associated therewith is either present at or absent from a predetermined location within a room;

(b) if the object is present at the predetermined location for less than a first duration, causing the ID code to be communicated to a computer located remotely along with an indication that the object is present at the predetermined location and causing power to be provided to an energy consumption device;

(c) if the object is absent from the predetermined location for less than a second duration, causing an indication that the object is not present at the predetermined location to be communicated to the computer and causing power to be withheld from the energy consumption device;

(d) if the object is absent from the predetermined location for more than the second duration, detecting for motion in the room; and

(e) if motion is detected in step (d), causing an indication that motion has been detected to be communicated to the computer after delaying a third duration.

21. The method of claim 20, wherein the energy consumption device is one of a lamp and a television.

22. The method of claim 20, further including repeating steps (a)-(e).

23. The method of claim 20, wherein:  
the object is an ID card; and  
the predetermined location is an ID card reader.

24. The method of claim 20, further including:

(f) if motion is not detected in step (d), causing power to be provided to or withheld from the energy consumption device based on an ambient temperature of the room.

25. The method of claim 24, further including repeating steps (a)-(f).

26. The method of claim 24, wherein step (f) includes:  
causing power to be provided to the energy consumption device when the ambient temperature is within a setback limit; and

causing power to be withheld from the energy consumption device when the ambient temperature is outside the setback limit.

27. The method of claim 24, wherein the energy consumption device is at least one of a heating system and a cooling system.

28. A security and energy control method comprising:

(a) detecting for the presence of an identification (ID) code associated with an object;

(b) in response to detecting the presence of the ID code, communicating the ID code to a computer and providing power to an energy consumption device;

(c) in response to detecting that the ID code has been absent for less than a first duration, communicating an indication of the absence of the ID code to the computer and withholding power from the energy consumption device, otherwise, detecting for motion in a field of view; and

(d) if motion is detected in the field of view and if the presence of the ID code is not detected within a second duration, communicating to the computer an indication that motion has been detected.

29. The method of claim 28, wherein the energy consumption device is one of a lamp and a television.

30. The method of claim 28, further including repeating steps (a)–(d).

31. The method of claim 28, further including:

(e) if motion is not detected in the field of view, providing or withholding power from the energy consumption device as a function of an ambient temperature of an environment.

32. The method of claim 31, wherein the energy consumption device is at least one of a heating system and a cooling system.

33. The method of claim 31, further including repeating steps (a)–(e).

34. The method of claim 28, wherein the ID code is embedded in a magnetically encodeable medium of the object.